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(54) Statistically robust traffic modelling method and apparatus

method and apparatus for controllina communication channel access in a communication system (10) determines channel allocations (106) which represent limits on communication channel access and conforms operations of the system (10) to the channel allocations (106). The channel allocations are determined by dividing a surface which emanates signals from communication units (26) into elemental areas, collecting past traffic data (102) describing past communication channel usage by the communication units (26) located in the elemental areas, generating a traffic model (104) for a future time interval based on the past traffic data, and determining the channel allocations (106) based on the traffic model.

100 BEGIN PREDICTIVE SYSTEM OPERATION COLLECT TRAFFIC DATA GENERATE TRAFFIC MODEL DETERMINE CHANNEL 106 ALLOCATIONS TRANSMIT 108 CHANNE ALLOCATIONS CONFORM **OPERATIONS** TO CHANNEL ALLOCATIONS END) 112

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